

NTIS #3-00

Investigation Title: Utilization of ERTS-A Data in Geological Evaluation  
Regional Planning, Forest Management, and Water  
Management in North Carolina

Proposal No. 18

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Principal Investigator: Charles W. Welby

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## 2. Land Use Survey and Mapping

### A. Land Use Classification

Color additive viewing and simple visual examination of ERTS-1 imagery demonstrates its usefulness in first order land use classification in North Carolina. Comparison of pre-ERTS-1 maps of various vintages with ERTS-1 imagery shows the growth of North Carolina cities such as Winston-Salem, Raleigh, and Greensboro. The imagery will be very useful in updating regional patterns of urbanization (ERTS-1 Image No. 1045-15254) and in studying patterns of land use change. Spectral differences within the urbanized areas suggest that these differences may be utilized to map land use patterns within the cities. Quarries, many secondary roads, excavations of various sorts, and vegetational differences are apparent on the imagery and can be mapped, and the data put to appropriate use.

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C.W. Welby (North Carolina State Univ.)  
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